

FIG. 1

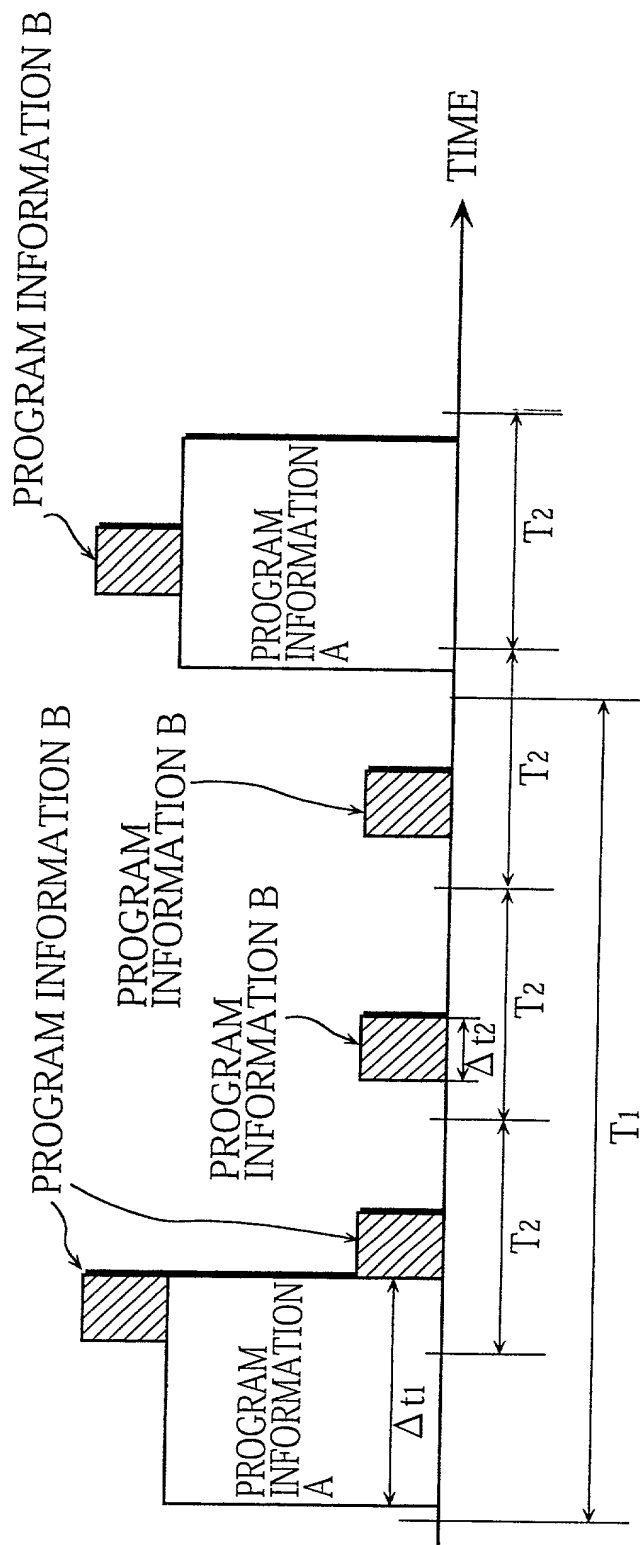


FIG. 2

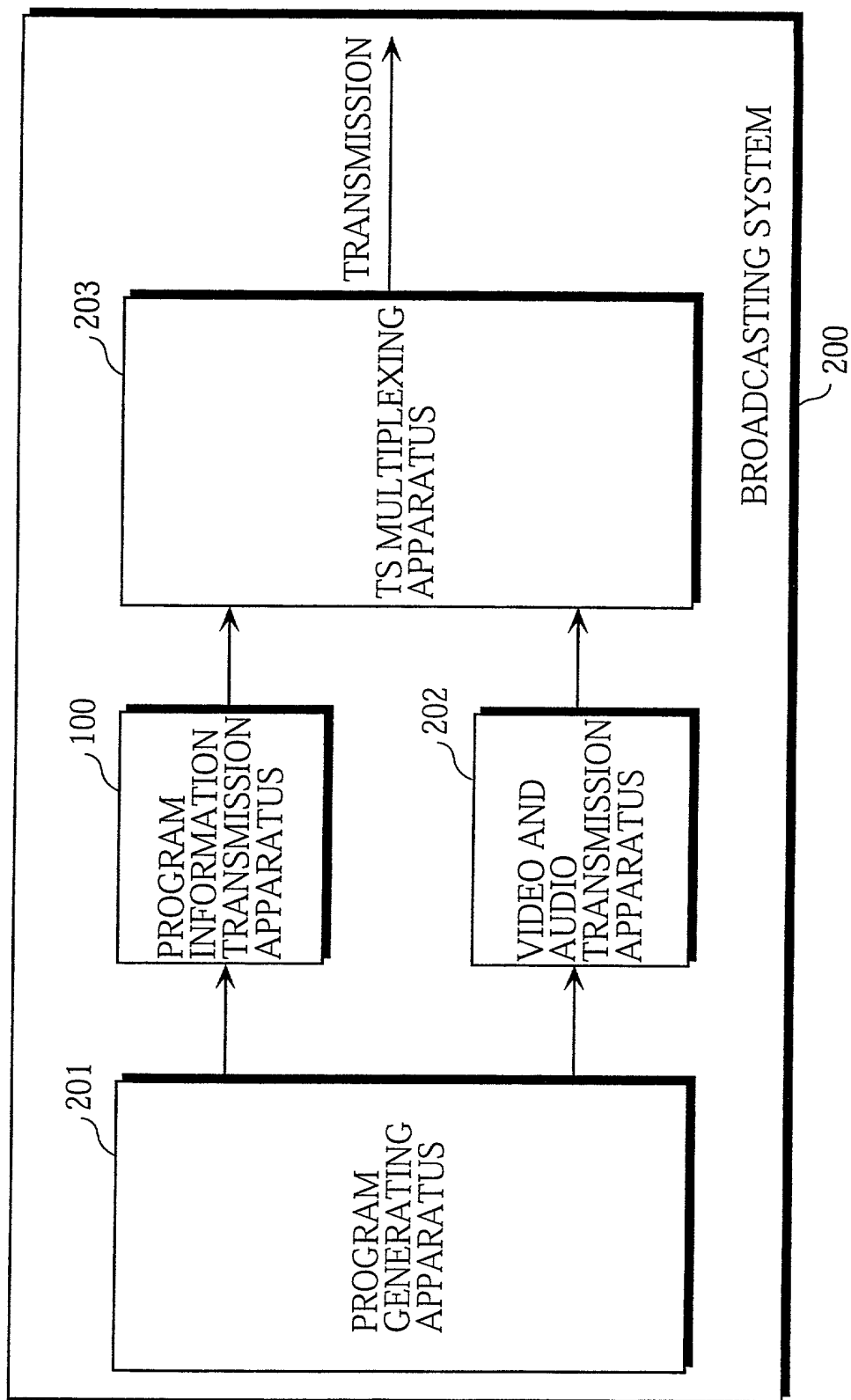
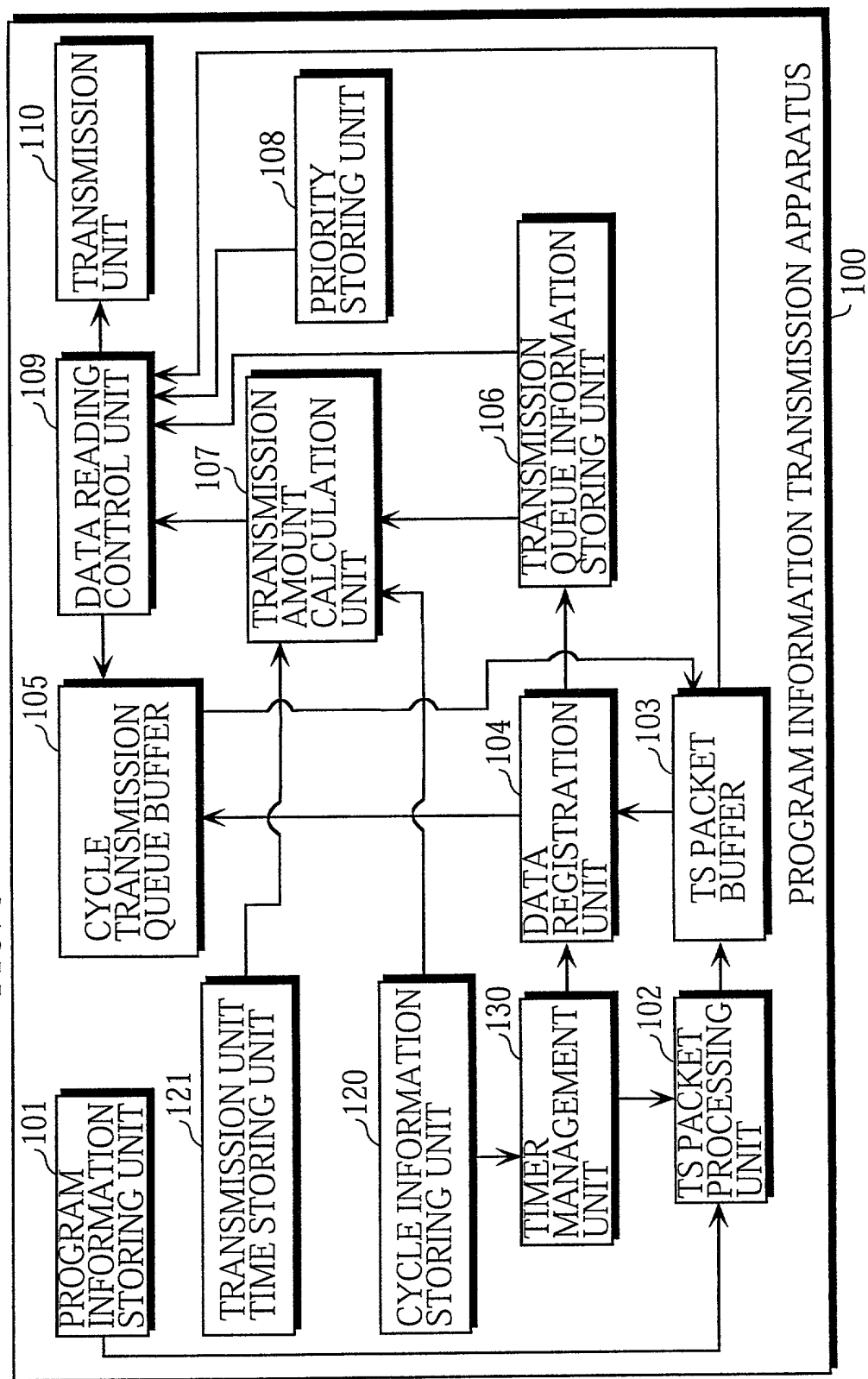


FIG. 3



1994/11/13 23:00	00:50	190byte	MIDNIGHT NEWS
...			
1999/10/14 12:15	01:00	450byte	AFTERNOON TV DRAMA
1999/10/14 11:30	00:45	100byte	AFTERNOON NEWS
1999/10/14 11:00	00:30	200byte	MORNING NEWS
START TIME	BROADCAST LENGTH	SIZE	PROGRAM DESCRIPTION

CHANNEL 1
CHANNEL 2
CHANNEL 3
301
302
303
304

FIG. 4C PROGRAM INFORMATION C

1999/10/16 23:00	00:50	300byte	PROFESSIONAL BASEBALL NEWS
...			
1999/10/14 12:15	01:00	500byte	WORLD NEWS
1999/10/14 11:30	00:45	200byte	VARIETY SHOW
1999/10/14 11:00	00:30	250byte	TV DRAMA
START TIME	BROADCAST LENGTH	SIZE	PROGRAM DESCRIPTION

CHANNEL 1
CHANNEL 2
CHANNEL 3
301
302
303
304

CHANNEL 100

FIG. 4B PROGRAM INFORMATION B

1999/10/16 23:00	00:50	200byte	MIDNIGHT NEWS
...			
1999/10/14 12:15	01:00	450byte	AFTERNOON TV DRAMA
1999/10/14 11:30	00:45	100byte	AFTERNOON NEWS
1999/10/14 11:00	00:30	200byte	MORNING NEWS
START TIME	BROADCAST LENGTH	SIZE	PROGRAM DESCRIPTION

CHANNEL 1
CHANNEL 2
CHANNEL 3
301
302
303
304

FIG. 4A PROGRAM INFORMATION A

FIG. 5

TYPE OF PROGRAM INFORMATION	CYCLE LENGTH
PROGRAM INFORMATION A(TableA)	3 SECONDS
PROGRAM INFORMATION B(TableB)	10 SECONDS
PROGRAM INFORMATION C(TableC)	10 SECONDS

FIG. 6

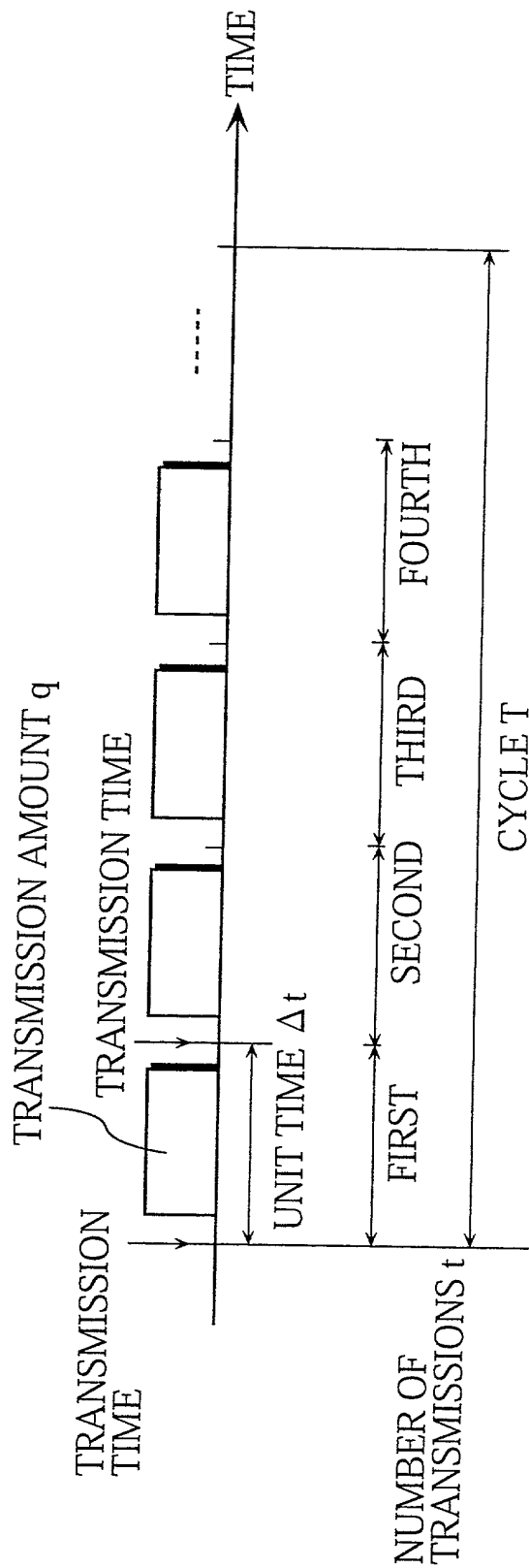


FIG. 7A

CYCLE=THREE SECONDS			
A1[1]	A1[2]	A1[3]	A1[4]
A2[1]	A2[2]	A2[3]	A2[4]
A3[1]	A3[2]	A3[3]	A3[4]

FIG. 7B

CYCLE=TEN SECONDS			
B1[1]	B1[2]	B1[3]	B1[4]
B2[1]	B2[2]	B2[3]	B2[4]
.	.	.	.
.	.	.	.
B100[1]	B100[2]	B100[3]	B100[4]
C1[1]	C1[2]	.	C1[21]
C2[1]	C2[2]	.	C2[20]
C3[1]	C3[2]	.	C3[19]
		C1[22]	.
		C2[21]	.
		C3[20]	.
		C1[39]	.
		C2[37]	.
		C3[39]	.
		C1[40]	.
		C2[38]	.
		C3[40]	.
		C1[61]	.
		C2[59]	.
		C3[61]	.
		C1[62]	.
		C2[70]	.
		C3[70]	.
		C1[69]	.
		C2[76]	.
		C3[76]	.

FIG. 8

CYCLE TRANSMISSION QUEUE BUFFER 105

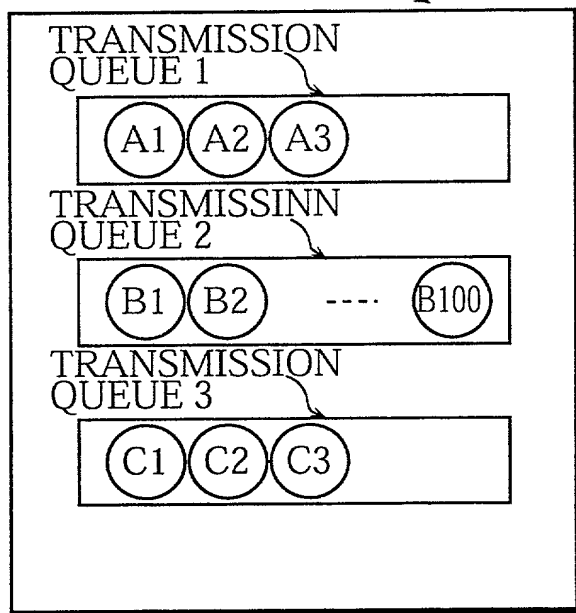


FIG. 9

TRANSMISSION QUEUE 1 TableA				
SubTable		Section1		
A1		4		
A2		4		
A3		4		
TRANSMISSION QUEUE 2 TableB				
SubTable		Section1		
B1		4		
B2		4		
.		.		
.		.		
B100		4		
TRANSMISSION QUEUE 3 TableC				
SubTable	Section1	Section2	Section3	Section4
C1	21	18	22	8
C2	20	17	22	
C3	19	20	22	15

FIG. 10

Table	PRIORITY
TableA	1
TableB	2
TableC	3

FIG. 12

CRITERION A-1	The number of packets that are transmitted per unit time period does not exceed the standard total transmission amount EL.
CRITERION B-1	The continuity of packets of a section is not interrupted by packets of another section during transmission
CRITERION B-2	Packets of tables given higher priorities are transmitted first .
CRITERION B-3	When the amount of transmitted packets of a current table reaches a corresponding standard table transmission amount Emi, the current table is switched to the next table.

FIG. 13

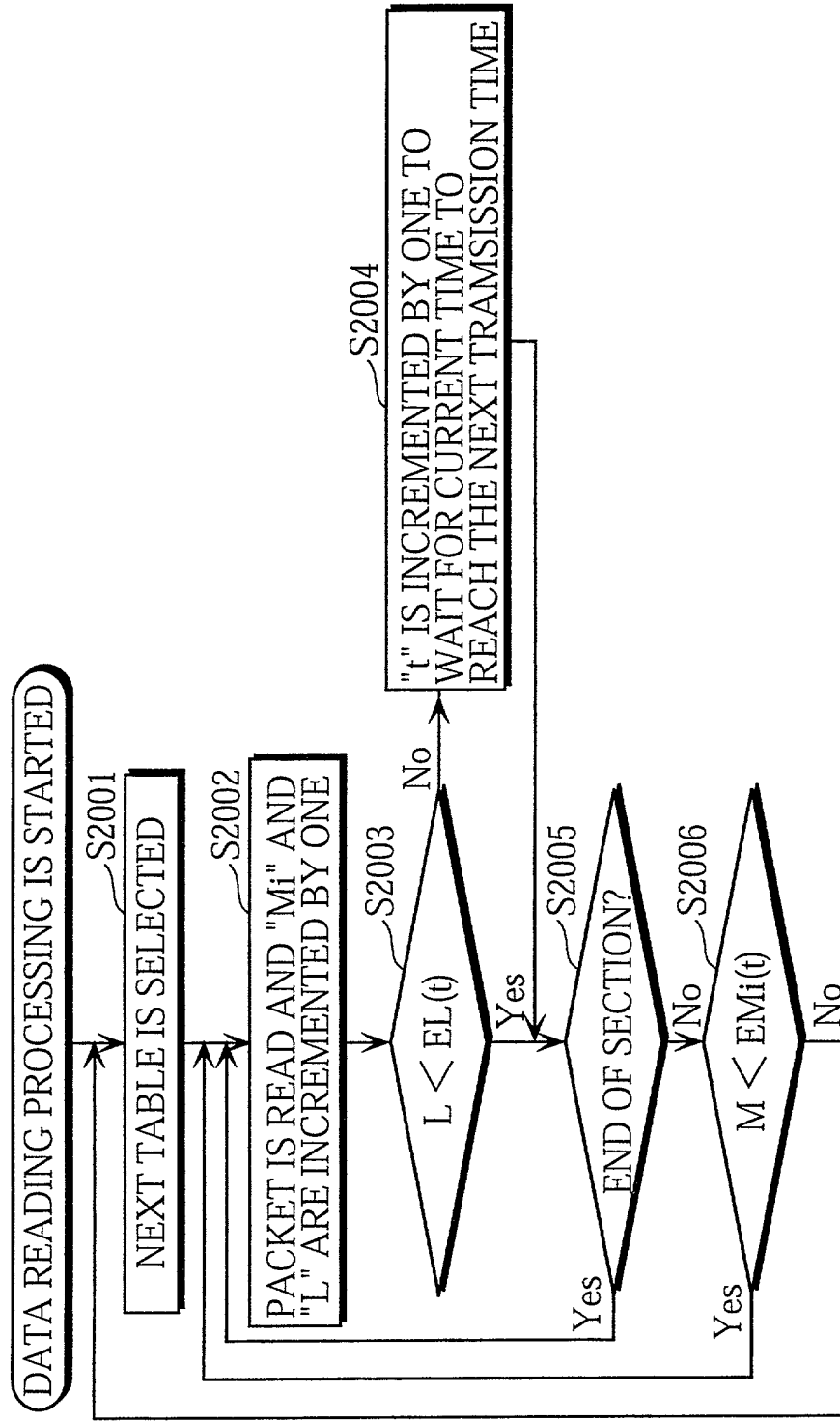


FIG. 14A

NUMBER OF TRANSMISSIONS _t	no.1	no.2	no.3	no.4	no.5	no.6	no.7	no.8	no.9
1	A1	A1	A1	A1	B1	B1	B1	B1	B2
2	B2	B2	B2	B3	B3	B3	B3	C1	C1
3	C1	C1	C1	C1	C1	C1	C1	C1	C1
4	C1	C1	C1	C1	C1	C1	C1	C1	C1
5	C1	A2	A2	A2	A2	B4	B4	B4	B4
6	B5	B5	B5	B5	B6	B6	B6	B6	B7
7	B7	B7	B7	B8	B8	B8	B8	B9	B9
8	B9	B9	B10	B10	B10	B10	C2	C2	C2

FIG. 14B

	TableA		TableB		TableC		
NUMBER OF TRANSMISSIONS _t	EM1(t)	M1	EM2(t)	M2	EM3(t)	M3	EL(t)
1	1	4	5	5	3	0	9
2	2	4	10	12	6	2	18
3	3	4	15	12	9	11	27
4	4	4	20	12	12	20	36
5	5	8	25	16	15	21	45
6	6	8	30	25	18	21	54
7	7	8	35	34	21	21	63
8	8	8	40	40	24	24	72

FIG. 15

Table	CYCLE	UNIT TIME PERIOD	NUMBER OF TRANSMISSION PERIODS	NUMBER OF PACKETS PER UNIT TIME PERIOD	ESi(t)	EMi(t)	ELt(t)
TableA	THREE SECONDS	100ms	12	0.4	$0.5 \times t$	$\text{INT}(\text{ES1}(t) + 0.9)$	$\text{ME1}(t)$
TableB	TEN SECONDS	100ms	400	4	$4.1 \times t$	$\text{INT}(\text{ES2}(t) + 0.9)$	$+\text{EM2}(t)$
TableC	TEN SECONDS	100ms	204	2.04	$2.1 \times t$	$\text{INT}(\text{ES3}(t) + 0.9)$	$+\text{EM3}(t)$

FIG. 16A

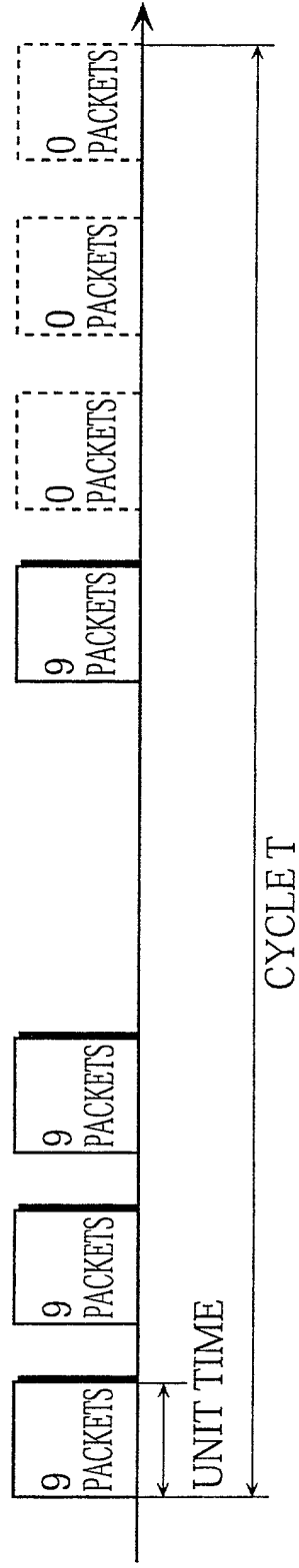


FIG. 16B

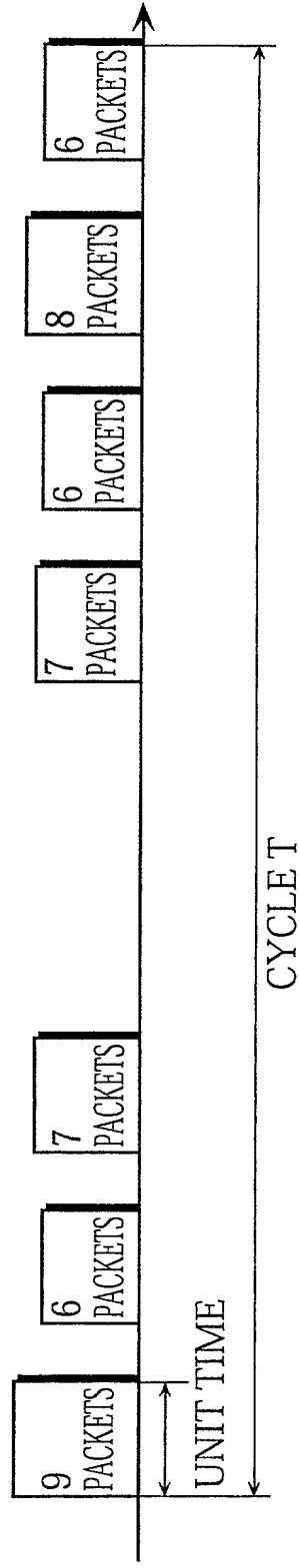


FIG. 17A

NUMBER OF TRANSMISSIONS	no.1	no.2	no.3	no.4	no.5	no.6	no.7	no.8	no.9
1	A1	A1	A1	A1	B1	B1	B1	B1	B2
2	B2	B2	B2	B3	B3	B3			
3	B3	B4	B4	B4	B4	B4	B4		
4	C1	C1	C1	C1	C1	C1			
5	C1	C1	C1	C1	C1	C1	C1		
6	C1	C1	C1	C1	C1	C1			
7	B5	B5	B5	B5	B6	B6	B6		
8	B6	B7	B7	B7	B7	B8			

FIG. 17B

NUMBER OF TRANSMISSIONS	TableA			TableB			TableC			
	ES1(t)	EM1(t)	M1	ES2(t)	EM2(t)	M2	ES3(t)	EM3(t)	M3	EL(t)
1	0.5	1	4	4.1	5	5	2.1	3	0	9
2	1.0	1	4	8.2	9	11	4.2	5	0	15
3	1.5	2	4	12.3	13	16	6.3	7	2	22
4	2.0	2	4	16.4	17	16	8.4	9	8	28
5	2.5	3	4	20.5	21	16	10.5	11	15	35
6	3.0	3	4	24.6	25	16	12.6	13	21	41
7	3.5	4	4	28.7	29	23	14.7	15	21	48
8	4.0	4	4	32.8	33	29	16.8	17	21	54

FIG. 18

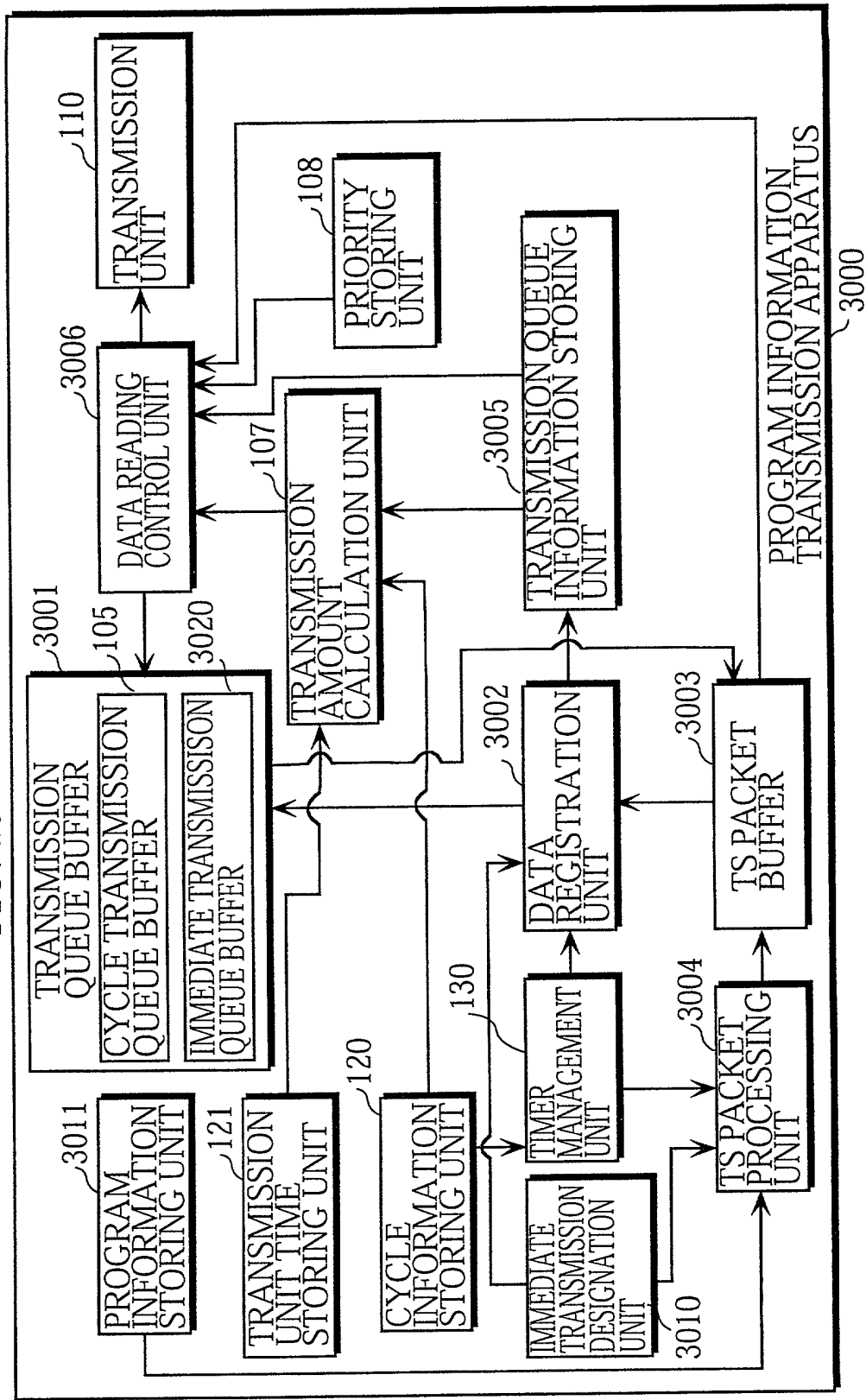


FIG. 20

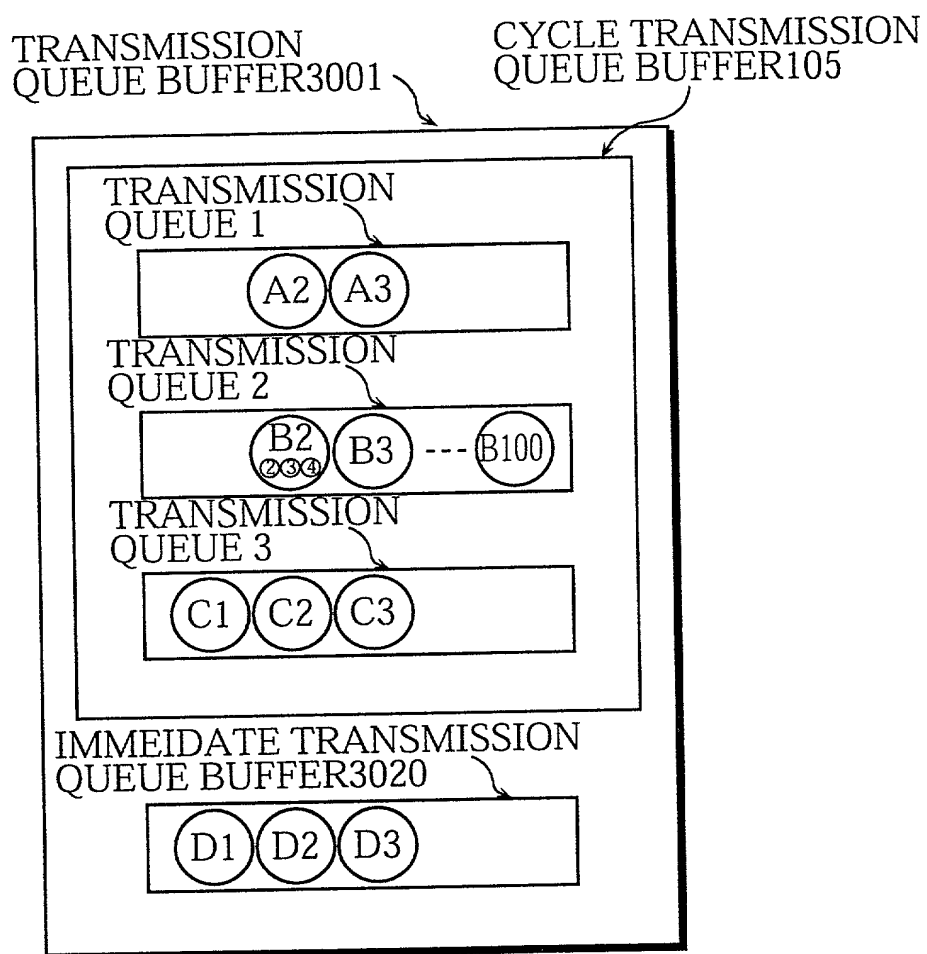


FIG. 21

TRANSMISSION QUEUE 1 TableA				
SubTable	Section1			
A1	4			
A2	4			
A3	4			
TRANSMISSION QUEUE 2 TableB				
SubTable	Section1			
B1	4			
B2	4			
•	•			
•	•			
B100	4			
TRANSMISSION QUEUE 3 TableC				
SubTable	Section1	Section2	Section3	Section4
C1	21	18	22	8
C2	20	17	22	
C3	19	20	22	15
IMMEDIATE TRANSMISSION QUEUE BUFFER TableD				
SubTable	Section1			
D1	4			
D2	4			
D3	4			

FIG. 22

